

CLAIMS

1. An imaging system comprising:

infrared light irradiating means for irradiating an infrared light;
an imaging means for imaging the position irradiated the infrared light
by the infrared light irradiating means and converting to an electrical signal;
and

an image processor for changing the signal storage time duration of the
imaging means at a predetermined period and sequentially and periodically
outputting images with a different light exposure, wherein

the image processor extends the images with the different light exposure
in the longitudinal direction and averages the signal level of both images after
extending so that a composite image is formed.

2. The imaging system of claim 1, wherein:

the image processor performs the extension of the images by inserting an
average value of the signal level of adjacent pixels in the longitudinal
direction into therebetween.

3. The imaging system of claim 1 or 2, wherein:

the image processor previously sets a desired value of the light exposure
and controls the signal storage time duration according to the desired value.

4. The imaging system of claim 3, wherein:

the imaging processor accumulates electrical signals of the imaging
means and compares the accumulated electrical signals with a preset reference
value according to the desired value to control the signal storage time

duration.

5. The imaging system of claim 3, wherein:

the image processor compares the number of pixels having the electrical signal more than the reference value in the imaging means with the number of preset reference pixels according to the desired value to control the signal storage time duration.

6. The imaging system of any of claims 1 to 5, wherein:

the infrared light irradiating means, the imaging means and the image processing units are provided in an automobile;

the infrared light irradiating means radiates the infrared light outside the automobile and the imaging means images the outside of the automobile.